

INCH-POUND

MIL-S-8805/53D
31 October 2001
SUPERSEDING
MIL-S-8805/53C
4 June 1993

MILITARY SPECIFICATION SHEET

SWITCHES, SENSITIVE, 4 CIRCUIT, ROLLER-LEVER, WATERTIGHT

INACTIVE FOR NEW DESIGN AFTER 10 FEBRUARY 1971

This specification forms a part of MIL-PRF-8805, dated 23 January 1998, and is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-8805.

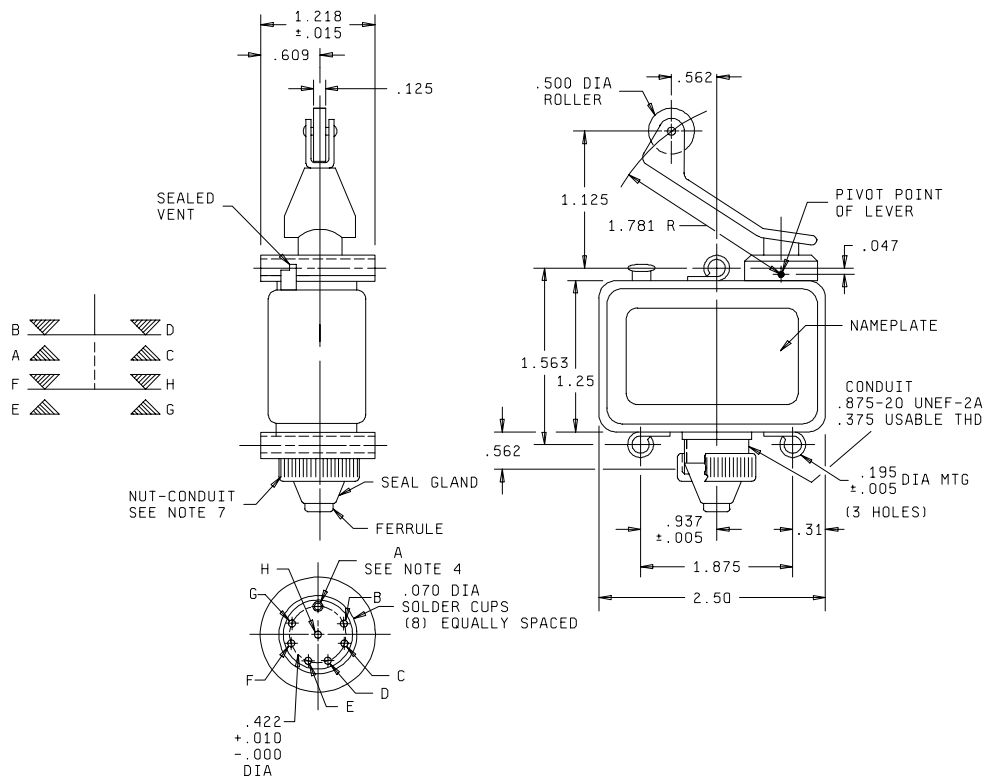
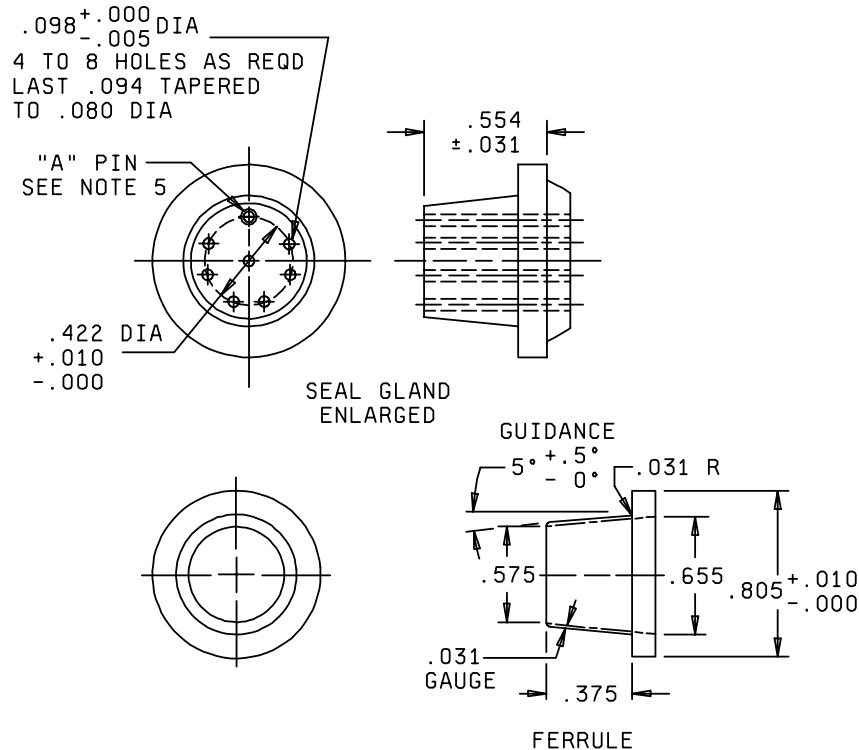


FIGURE 1. Dimensions and configuration.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm
.0003	.01	.094	2.39	.500	12.70	1.125	28.58
.005	0.13	.098	2.49	.554	14.07	1.218	30.94
.010	0.25	.125	3.18	.562	14.27	1.25	31.75
.015	0.38	.193	4.90	.575	14.61	1.563	39.70
.031	0.79	.25	6.35	.609	15.47	1.781	45.24
.047	1.19	.31	7.87	.655	16.64	1.875	47.63
.070	1.78	.375	9.53	.805	20.45	2.50	63.50
.080	2.03	.422	10.72	.937	23.80		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .02$ (0.51 mm) for two place decimals and $\pm .010$ (0.25 mm) for three place decimals.
4. The "A" pin shall be permanently indicated with a circle.
5. One hole on small end of gland shall be permanently marked with a circle, to be mounted on "A" pin.
6. The circuit and the terminal arrangement shall be marked on the switch case.
7. The dimensions of the electrical conduit coupling nut shall be in accordance with AN3054-8 or equivalent. Alternative base metals and protective finishes, as approved by the qualifying activity, may be used.

FIGURE 1. Dimensions and configuration - Continued.

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REQUIREMENTS:

Dimensions and configuration: See figure 1.

Enclosure design: 3 (watertight).

Temperature characteristic: 2 (-65° to +125°C).

Shock type: 50 g's, sawtooth, in accordance with method 213, test condition G, MIL-STD-202.

Vibration grade: 1 (10 to 500 Hz).

Weight: 8.25 ounces maximum.

Operating characteristics:

Actuating force: 7.5 \pm 2 pounds. 1/

Overtravel force: 16 \pm 3 pounds. 1/

Movement differential: .050 inch minimum to .100 inch maximum.

Pretravel: .090 inch to .140 inch.

Overtravel: .281 inch minimum.

Coincidence of operating and releasing points: In switches having more than one moving contact, the moving contacts shall open and close together within .010 as measured in actuator travel at the roller axis.

Material:

Ferrule: Deep drawn steel gauge number 22 (.031 inch), plated to resist corrosion.

Seal gland: Silicone rubber or equivalent.

Contact resistance: Not applicable.

Mechanical endurance: 100,000 cycles.

Electrical endurance: 100,000 cycles.

Conformance:

Group B: Not applicable.

Part or Identifying Number (PIN): MS27996-1.

Electrical ratings: See table I.

1/ Force specifications converted from angular to rectangular for ease of inspection.

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TABLE I. Electrical ratings.

Load	Sea level	
	28 V dc	115 V ac, 400 Hz
	amperes	amperes
Resistive	15	10
Inductive	10	10
Lamp	5	6

Custodians:

Army - CR

Navy - EC

Air Force - 11

DLA - CC

Preparing activity:

DLA - CC

(Project 5930-1126-15)

Review activities:

Army - AR, MI

Navy - AS, MC, OS, SH

Air Force - 19, 99